Space: The Asteroid Frontier February 9, 2012 Dr. Lucy McFadden Scientist and Chief for Higher Education NASA Goddard Space Flight Center Greenbelt, MD 20771

## Abstract:

There are many ways of studying the Asteroid Frontier as a scientist. In my career, I have used large telescopes atop a 14,000 ft mountain top observatory in Hawaii, used the Hubble Space Telescope in orbit around the Earth, traveled to Antarctica to collect meteorites sitting on the ice waiting for them to be recovered by scientists for scientific investigation, walked the desert with 50 students from University of Khartoum searching for fragments of an asteroid that collided with earth, exploded in the upper atmosphere and rained fragments on the desert floor. Most recently, I have looked at one of the largest Main Belt Asteroids named (4) Vesta through the eyes of a robotic spacecraft named Dawn, exploring the asteroid frontier. I will share my adventures, place the thrill of scientific exploration through NASA's solar system exploration program in context and provide opportunities for students to engage in NASA's exciting missions to expand scientific understanding of Earth and the Universe in which we live.